

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. **(Currently amended)** An endoluminal graft deployment catheter, comprising:
a proximal outer tube section, having a proximal end and a distal end;
an intermediate tube extending through the proximal tube section and beyond the distal end;
a central core, extending through the intermediate tube; and
a cap attached to the central core;
a tubular sheath extending over a portion of the intermediate tube and having an open distal end and a proximal end, the open distal end of the tubular sheath having a first diameter and the proximal end of the tubular sheath having a second diameter that is smaller than the first diameter, the proximal end being coupled to the intermediate tube, the tubular sheath defining a proximal cavity between the tubular sheath and the intermediate tube for receiving a proximal end of a prosthesis; and
a plug positioned in the proximal cavity between the tubular sheath and the intermediate tube, the plug defining a distal surface that faces the proximal end of the prosthesis.
2. **(Original)** An endoluminal graft deployment catheter as in Claim 1, wherein the intermediate tube is rotationally linked to the outer tube.
3. **(Original)** An endoluminal graft deployment catheter as in Claim 1, wherein the cap is axially movable between a first position in which it contacts the outer tube and a second position in which it is spaced distally apart from the outer tube.
4. **(Original)** An endoluminal graft deployment catheter as in Claim 4, wherein the central core comprises a flexible tube.
5. **(Currently amended)** An endoluminal graft deployment catheter as in Claim 4, wherein the flexible tube comprises a polymeric braid.

6. **(Currently amended)** An endoluminal graft deployment catheter as in Claim 5, wherein the flexible tube further comprises a reinforcing element which overlaps the point of contact between the cap and the outer tube.

7. **(Original)** An endoluminal graft deployment catheter as in Claim 6, wherein the reinforcing element comprises a tubular element carried by the flexible tube.

8. **(Currently amended)** An endoluminal graft deployment catheter, comprising:
an elongate flexible body, having a proximal end and a distal end;
a proximal outer tube section, having a proximal end and a distal end;
a distal outer tube section, having a proximal end and a distal end,
an intermediate tube extending through the proximal outer sheath tube section and beyond the distal end of the proximal outer tube section; the intermediate tube having a first portion and a second portion, the first portion having a larger diameter than the second portion to form a distally facing surface;

a central core, extending through the proximal and distal outer tube sections and the intermediate tube;

a tubular sheath having an open distal end and a proximal end, the open distal end of the tubular sheath having a first diameter and the proximal end of the tubular sheath having a second diameter that is smaller than the first diameter, the proximal end of the tubular sheath being coupled to the second portion of the intermediate tube, the tubular sheath defining a proximal cavity for receiving a proximal end of a prosthesis; and

a spacer for filling at least partially a space between the distally facing surface of the intermediate tube and an outer surface of the tubular sheath

wherein the proximal and distal tube sections define a prosthesis cavity therein for carrying the prosthesis; and axial separation of the proximal tube section from the distal tube section opens the cavity to release the prosthesis.

9. **(Original)** An endoluminal graft deployment catheter as in Claim 8, wherein each of the proximal tube section and the distal tube section is rotationally linked to the central core.

10. **(Original)** An endoluminal graft deployment catheter as in Claim 8, wherein at least one of the proximal tube section and the distal tube section is axially movable between a first position in which the cavity is closed and a second position in which the cavity is open.

11. **(Original)** An endoluminal graft deployment catheter as in Claim 10, comprising a junction between the proximal tube section and the distal tube section when the cavity is closed, and further comprising a reinforcing element spanning the junction.

12. **(Original)** An endoluminal graft deployment catheter as in Claim 11, wherein the reinforcing element comprises a tube.

13-14. **(Canceled)**

15. **(New)** An endoluminal graft deployment catheter as in Claim 1, wherein the plug substantially fills a space defined between the distal surface of the plug, an inner surface of the tubular sheath and the outer surface of the intermediate tube.

16. **(New)** An endoluminal graft deployment catheter as in Claim 1, wherein the plug substantially fills a proximal end of the proximal cavity.

17. **(New)** An endoluminal graft deployment catheter as in Claim 1, wherein the tubular sheath is configured to constrain, at least a portion, of the vascular graft in a reduced diameter configuration.

18. **(New)** An endoluminal graft deployment catheter as in Claim 17, wherein the tubular sheath comprises PTFE.

19. **(New)** An endoluminal graft deployment catheter, comprising:

a proximal outer tube section, having a proximal end and a distal end;

an intermediate tube extending through the proximal tube section and beyond the distal end;

a central core, extending through the intermediate tube; and

a tubular sheath having an open distal end and a proximal end, the open distal end of the tubular sheath having a first diameter and the proximal end of the tubular sheath having a second diameter that is smaller than the first diameter, the proximal end being coupled to the intermediate tube, the tubular sheath defining a proximal cavity for

receiving a proximal end of a prosthesis, the tubular sheath configured to maintain the proximal end of the prosthesis in a compressed configuration; and

a plug positioned in the proximal cavity, the plug defining a distal surface that faces the proximal end of the prosthesis.

20. (New) An endoluminal graft deployment catheter as in Claim 19, wherein the plug substantially fills a space defined between the distal surface of the plug, an inner surface of the tubular sheath and the outer surface of the intermediate tube.

21. (New) An endoluminal graft deployment catheter as in Claim 19, wherein the plug substantially fills a proximal end of the proximal cavity.

22. (New) An endoluminal graft deployment catheter as in Claim 19, wherein the tubular sheath is configured to constrain, at least a portion, of the vascular graft in a reduced diameter configuration.

23. (New) An endoluminal graft deployment catheter as in Claim 22, wherein the tubular sheath comprises PTFE.

24. (New) An endoluminal graft deployment catheter as in Claim 19, comprising a cap attached to the central core.

25. (New) An endoluminal graft deployment catheter as in Claim 24, wherein the proximal and distal tube sections define a prosthesis cavity therein for carrying the prosthesis; and axial separation of the proximal tube section from the distal tube section opens the cavity to release the prosthesis.